A

Application No. Applicant(s) 10/688,424 WAKALOPULOS, GEORGE Notice of Allowability Examiner **Art Unit** Thuy V. Tran 2821 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. 1. A This communication is responsive to <u>amendment submitted on 4/21/2005</u>. 2. The allowed claim(s) is/are 1-22. 3. The drawings filed on 16 October 2003 are accepted by the Examiner. 4. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) 🔲 All b) Some* c) None of the: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _ Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 5. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. 6. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) I hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 7. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application (PTO-152) 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date 3. Information Disclosure Statements (PTO-1449 or PTO/SB/08), 7. Examiner's Amendment/Comment Paper No./Mail Date 8. X Examiner's Statement of Reasons for Allowance 4. Examiner's Comment Regarding Requirement for Deposit of Biological Material 9. Other PRIMARY EXAMINER

DETAILED ACTION

This is a response to the Applicant's amendment submitted on April 21st, 2005. In virtue of this amendment, claims 1-22 remain active in the instant application.

Allowable Subject Matter

1. Claims 1-22 are allowed.

Reasons for Allowance

2. The following is an examiner's statement of reasons for allowance:

Prior art fails to disclose or fairly suggest:

- A wide area electron beam device comprising a neutral ion plasma generated within the spatial volume between the first and second wire mesh electrodes, the ion plasma supplying ions to the cathode through one of the first and second wire mesh electrodes, the ions impacting the cathode with sufficient force to cause secondary electron emission having sufficient energy to traverse through the ion plasma toward the anode, thereby forming an electron beam extending over the anode, in combination with the remaining claimed limitations as called for in independent claim 1 (claims 2-12 are allowed since they are dependent on claim 1); and
- A wide area electron beam device comprising (1) a doped semiconductor slice high voltage cathode between the first and second electrodes configured to allow charged particle permeability therethrough and having a high voltage thereon, drawing ions from the plasma through the first wire mesh electrode and producing secondary electrons traveling toward and traversing the second wire mesh grid by means of a positive voltage thereon, and (2) a conductive plate anode near the second wall of the

chamber receiving the secondary electrons traversing the second grid thereby forming an electron beam impinging upon a target placed upon the anode, in combination with the remaining claimed limitations as called for in independent claim 13 (claims 14-22 are allowed since they are dependent on claim 13).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thuy V. Tran whose telephone number is (571) 272-1828. The examiner can normally be reached on M-F (8:00 AM -5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on (571) 272-1834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

07/08/2005

Page 4

THUY K TRAN